

## ABSTRACT

A method and computerized system is disclosed for managing the underwriting, quoting and binding an insurance policy with regard to the technology used to militate against the financial consequences of property losses. The invention utilizes a classifier for categorizing and weighing risk, composed of data representing in an identified building, a first unmitigated insurance risk and a second insurance risk, based upon the use of certain technology. Each data structure forms a difference, referred to as a weighted difference, between the unmitigated risk and the mollified risk. A plurality of such weighted differences are summed such that the weighted differences generates a minimized risk for a building structure under consideration. Combinations of technologies, employed in existing building structures to a classification, which then permits an underwriter to establish a premium. In another aspect of the invention data structures representing the quantification of risk reduction attendant a given technology or product are chained into a plurality of decision trees that process a construction phase and a pruning phase.

The construction phase requires that the set of building structures and corresponding combination of technologies be partitioned into two or more subpartitions, until a stopping criterion is met and a classification assigned. The decision applies a splitting criterion to every node of the tree. These splitting criteria are determined by applying a predetermined rule or function that an underwriter applies to eventually place the applicant for insurance into a classification that is then utilized as a factor in establishing the premium.